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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,779	05/24/2002	Walter Roethlingshoefer	10191/2180	6397
26646	7590	10/29/2003	EXAMINER	
KENYON & KENYON			CAMERON, ERMA C	
ONE BROADWAY			ART UNIT	PAPER NUMBER
NEW YORK, NY 10004			1762	

DATE MAILED: 10/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/030,779	ROETHLINGSHOEFER ET AL.	
	Examiner	Art Unit	
	Erma Cameron	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-35 is/are pending in the application.
- 4a) Of the above claim(s) 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 17-31 and 33-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. Applicant's arguments filed 9/26/2003 have been fully considered but they are not fully persuasive.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The rejection of Claims 17-31 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is withdrawn because of the amendment filed 9/26/2003.

4. Claims 17-19 and 22-31, 33 and 35 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating the substrate with a siloxane, does not reasonably provide enablement for any material being used to treat the substrate. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The specification does not support the use of materials other than siloxanes. Claims drawn to esterifying the ceramic would read on many materials other than siloxanes.

5. Claims 17-31 and 33-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed does not disclose that only the ceramic surface area is esterified, as now presented in claims 17, 34 and 35. The examiner cannot find where the term "only" appears in the specification.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. The rejection of Claims 18, 21, 27 and 30 under 35 U.S.C. 112, second paragraph, is withdrawn because of the amendment filed 9/26/2003.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 17-20, 22-23, 27 and 34-35 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by White, Proceedings of the IEEE, 57(9), pp 1610-1615, 1969.

White teaches dipping or spraying a metallized ceramic with a solution of a siloxane that is then cured by heat onto the surface (see Abstract, Figure 2, p 1612), for mechanical and moisture protection. Figure 2 shows the siloxane binding to the surface hydroxyls of the ceramic, and the crosslinking of the siloxane bound to the ceramic. White implies that the siloxane does not bind if surface hydroxyls are not present, as would be expected of the metal portions.

The metallized ceramic may then undergo metallization by leads that are soldered or welded and chemical cleaning (p 1611).

10. The rejection of Claims 17-20 and 27 under 35 U.S.C. 102(b) as being clearly anticipated by Wong (5213864) is withdrawn because of the amendment filed 9/26/2003.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The rejection of Claims 21 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Proceedings of the IEEE, 57(9), pp 1610-1615, 1969.

White is applied here for the reasons given above.

White teaches that the siloxane is diluted in a suitable solvent, with a "suitable dilution" (p 1612), and cured at 120-300 degrees C step cure.

It would have been obvious to one of ordinary skill in the art to have optimized the solution characteristics and cure characteristics through no more than routine experimentation.

Allowable Subject Matter

13. Claims 24-26, 30-31 and 33 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not disclose nor suggest coating the ceramic portion of a metallic-ceramic hybrid substrate by treating the substrate with a siloxane solution, heat treating the siloxane coating to crosslink the siloxane and then removing the excess, non-crosslinked siloxane from the substrate by wiping, blowing or washing. The closest prior art appears to be White, but White does not teach the removal of excess, non-crosslinked siloxane, leaving only the ceramic areas with bound siloxane.

Priority

15. Applicant should include a reference to the PCT priority at the beginning of the specification.

Conclusion

16. The office action summary shows that the certified copy of the priority document has been received in this national stage application.

17. The 1449 paper had been signed by examiner Ling Xu on 2/25/2003. A new copy will be sent to the applicant with this action.

18. The title of the specification does not agree with the title as presented in the oath. One consistent title should be used throughout.

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erma Cameron whose telephone number is 703-308-2330. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


ERMA CAMERON
PRIMARY EXAMINER

Erma Cameron
Primary Examiner
Art Unit 1762

October 24, 2003